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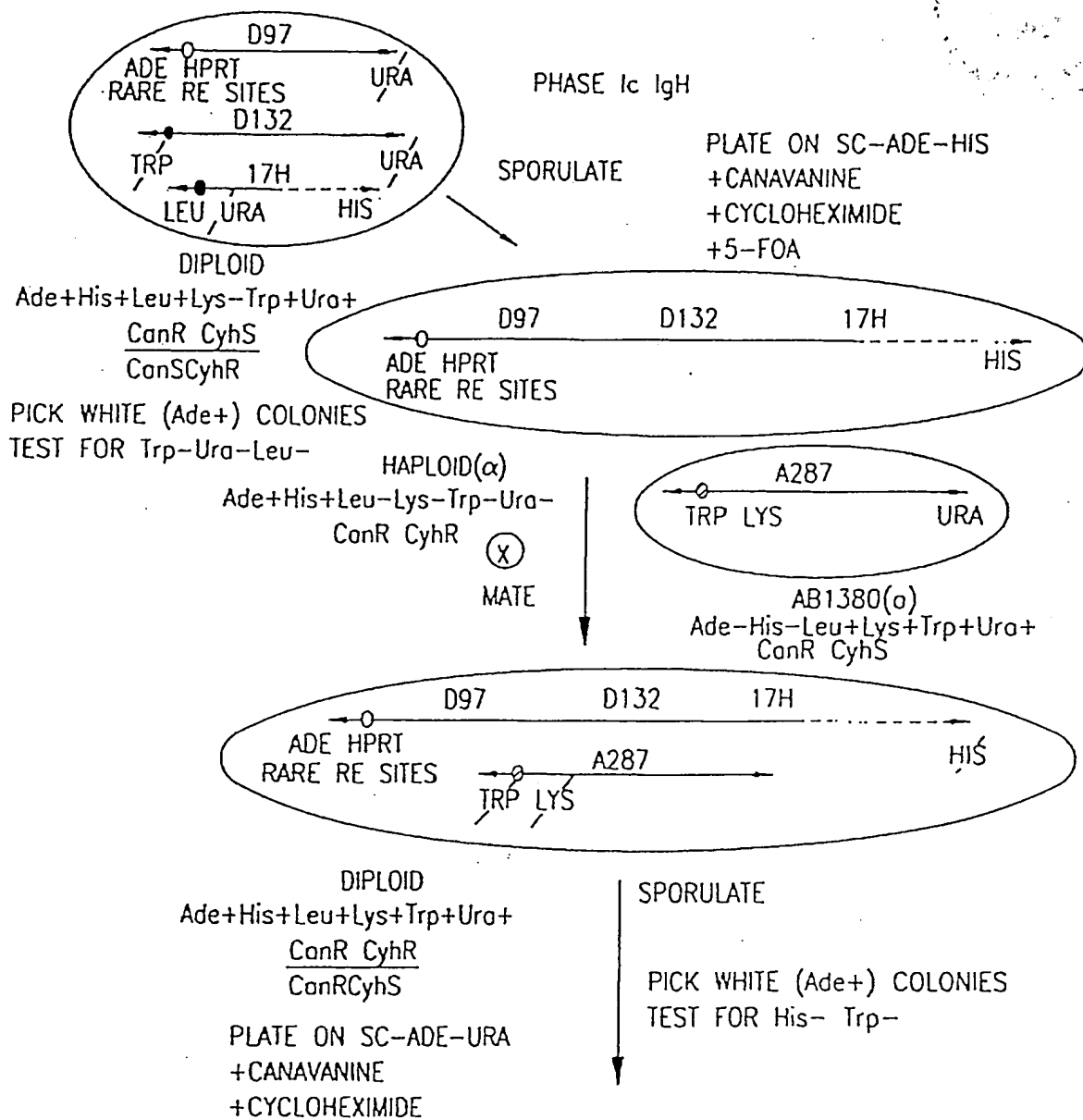
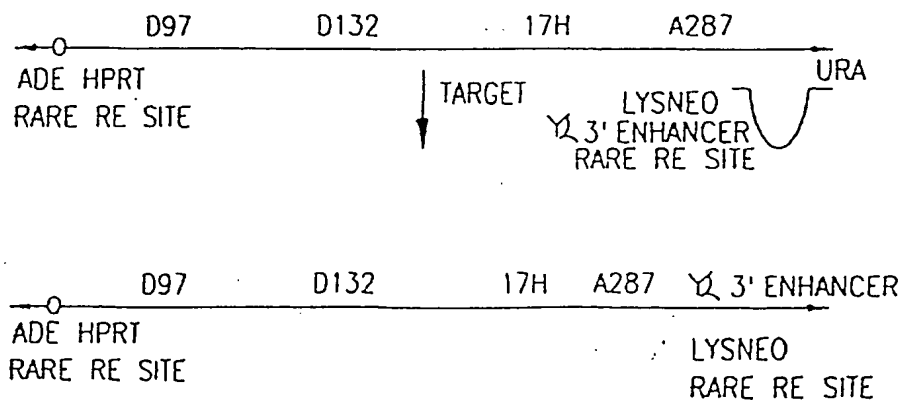
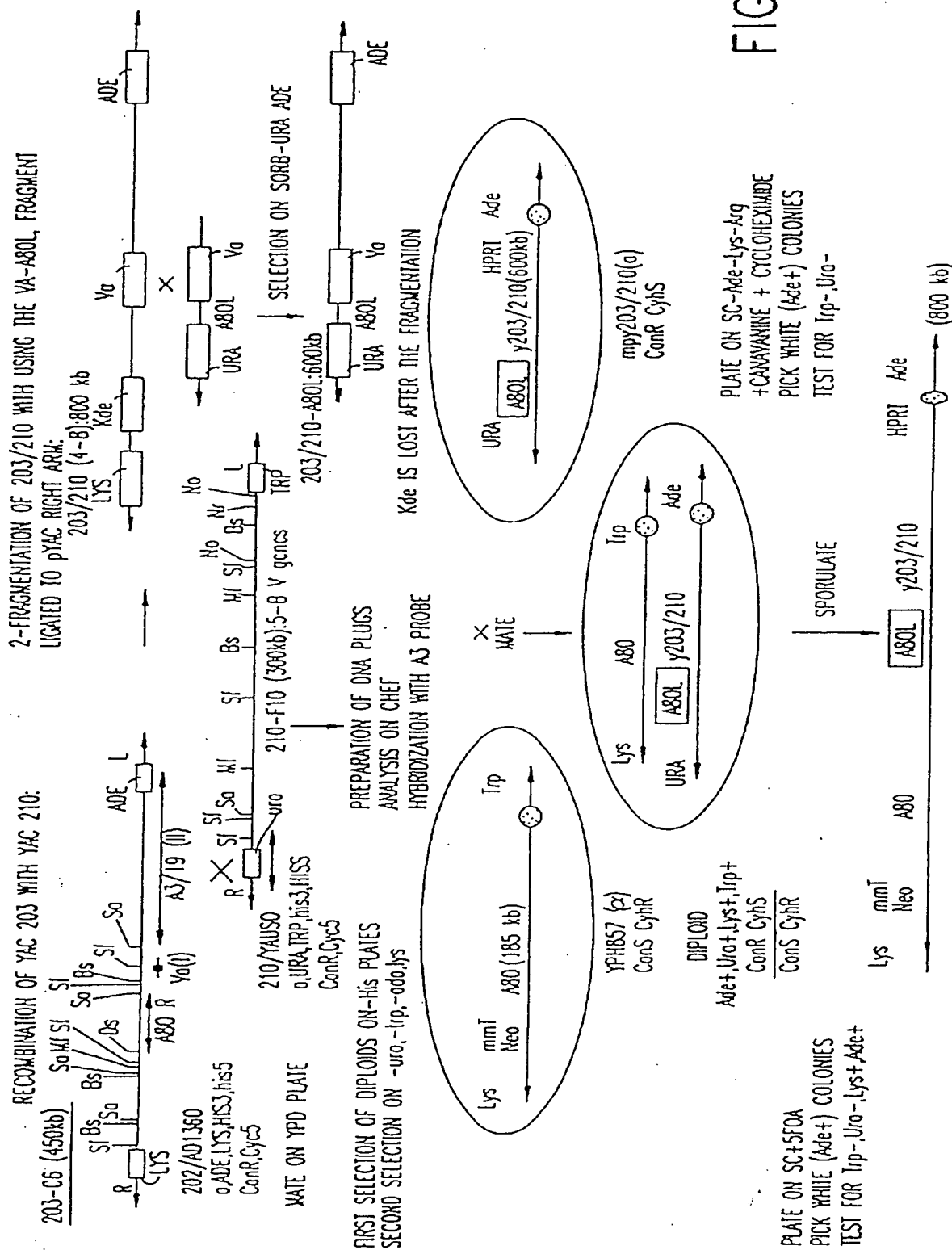


FIG.1



26 Kip



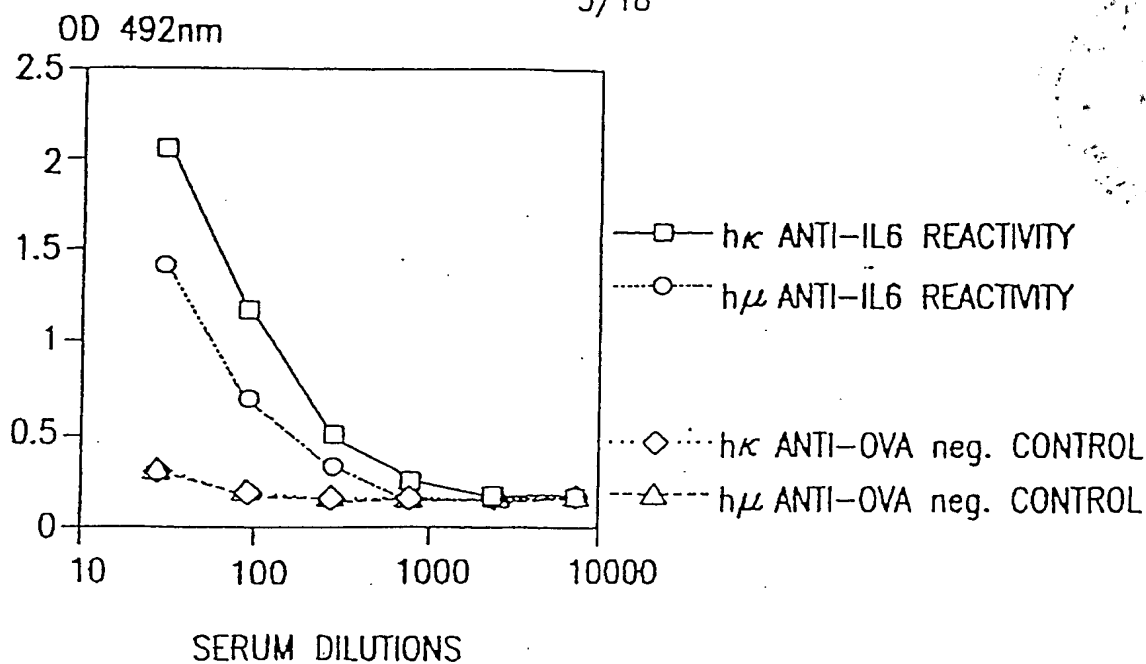


FIG.3

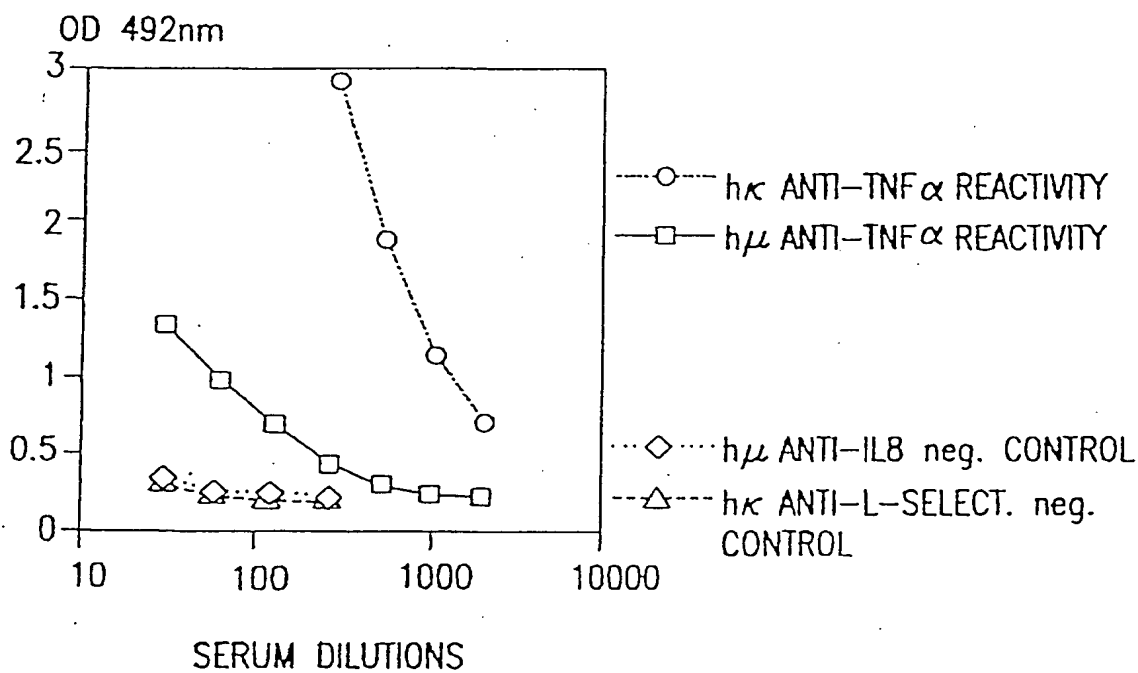


FIG.4

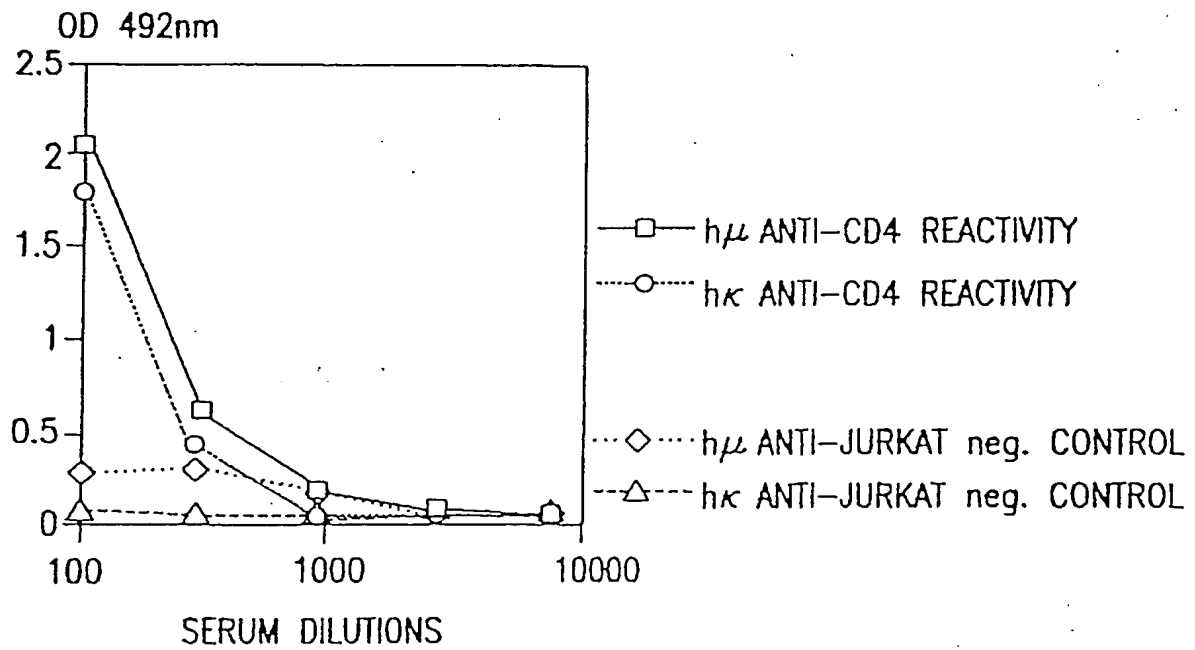


FIG.5

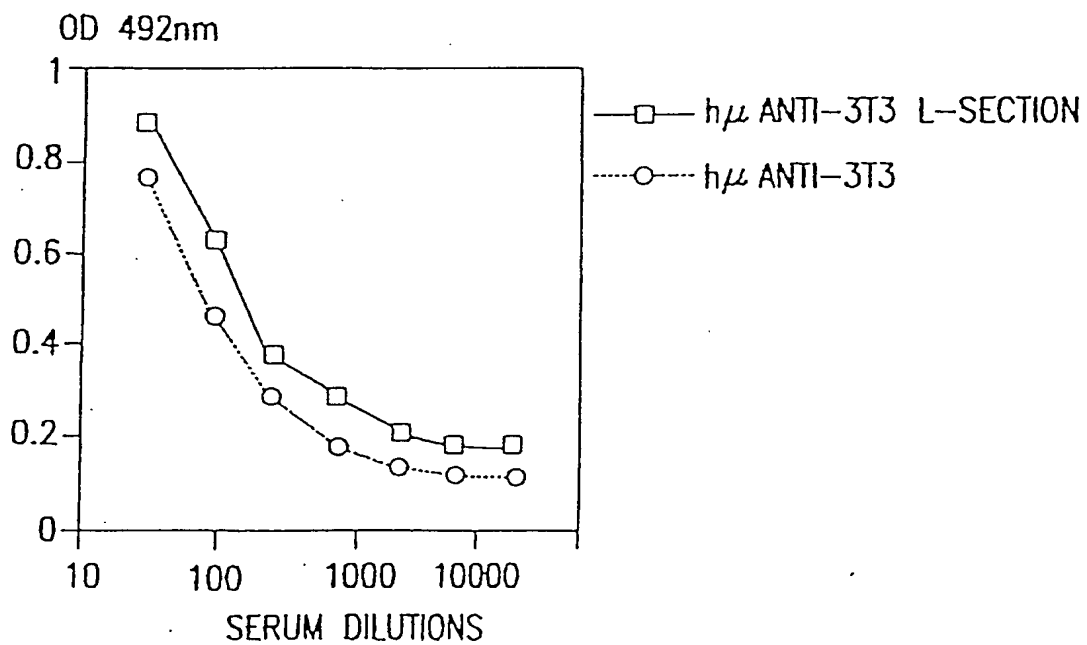


FIG.6

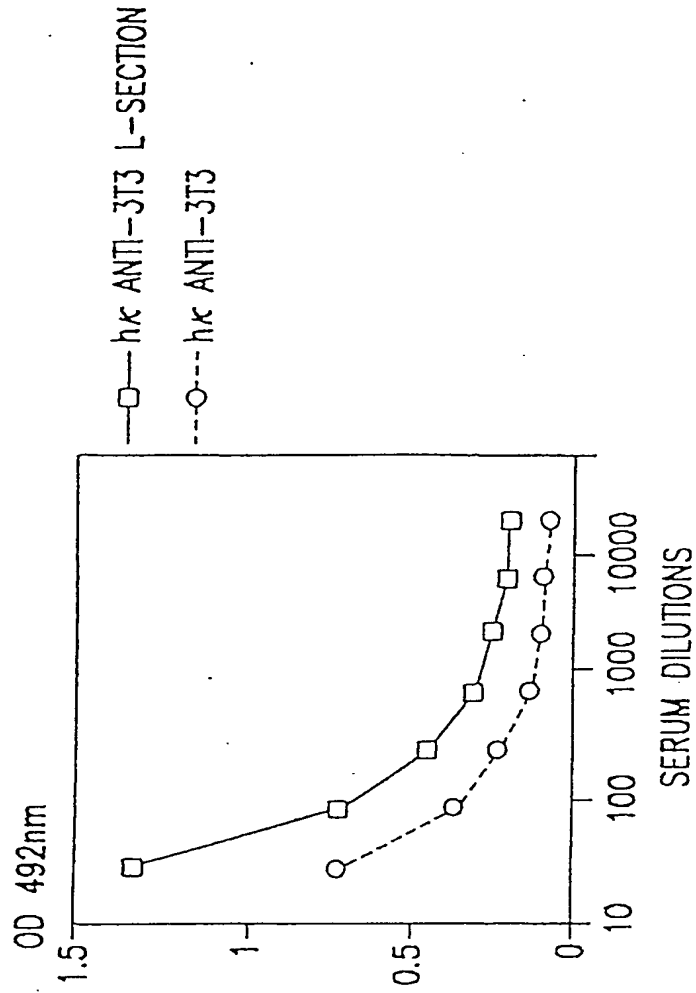


FIG.7

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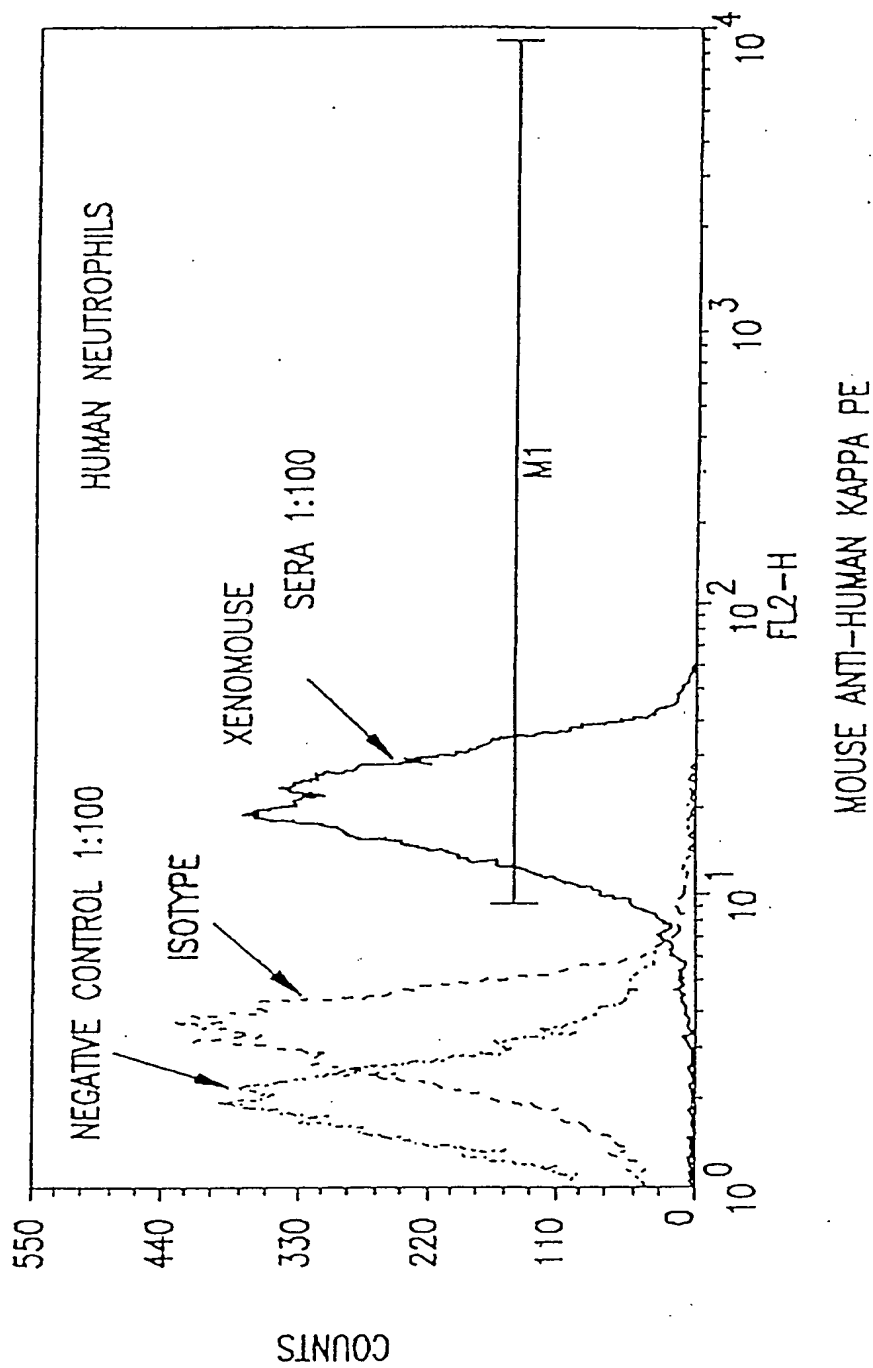


FIG.8

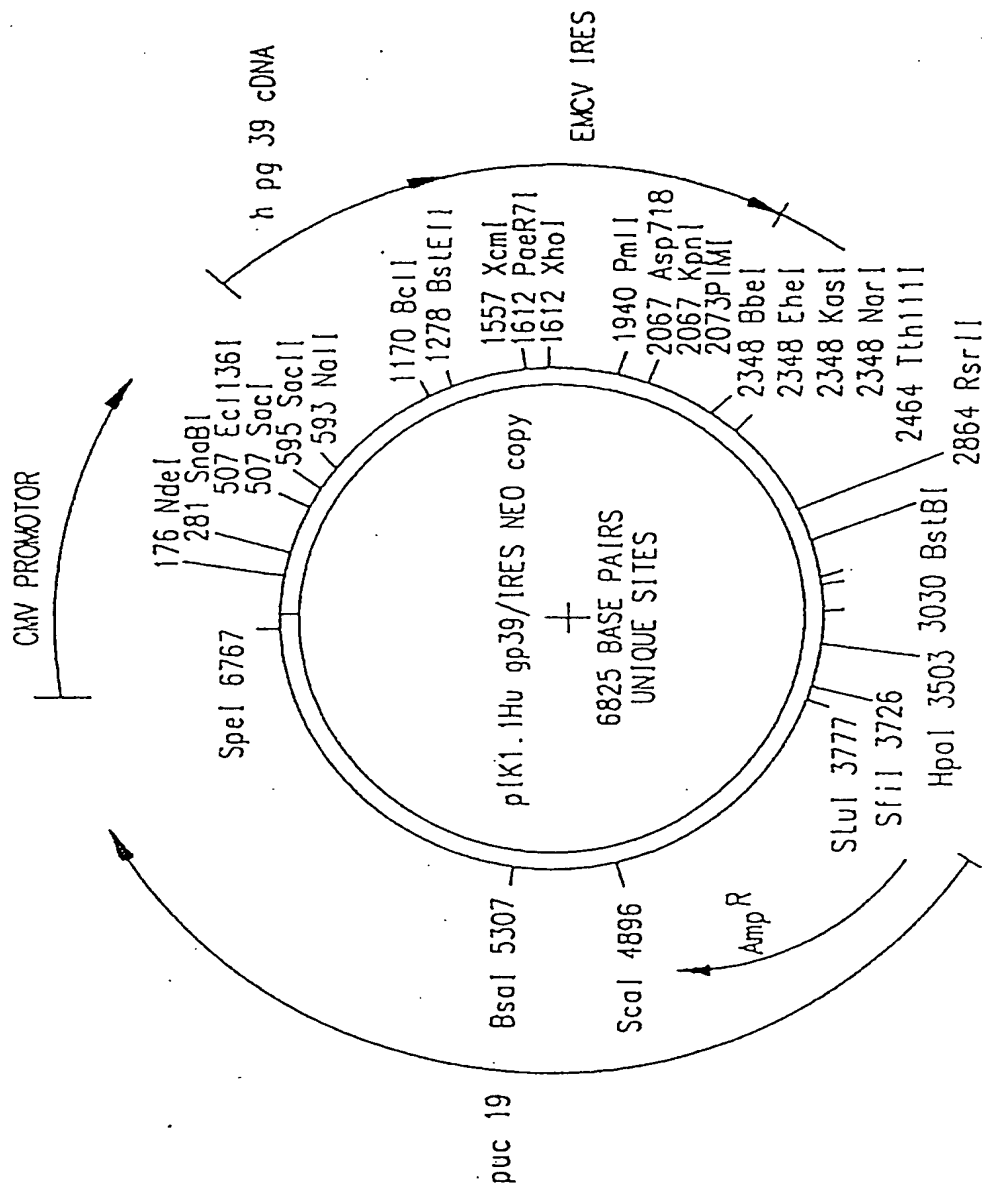


FIG.9

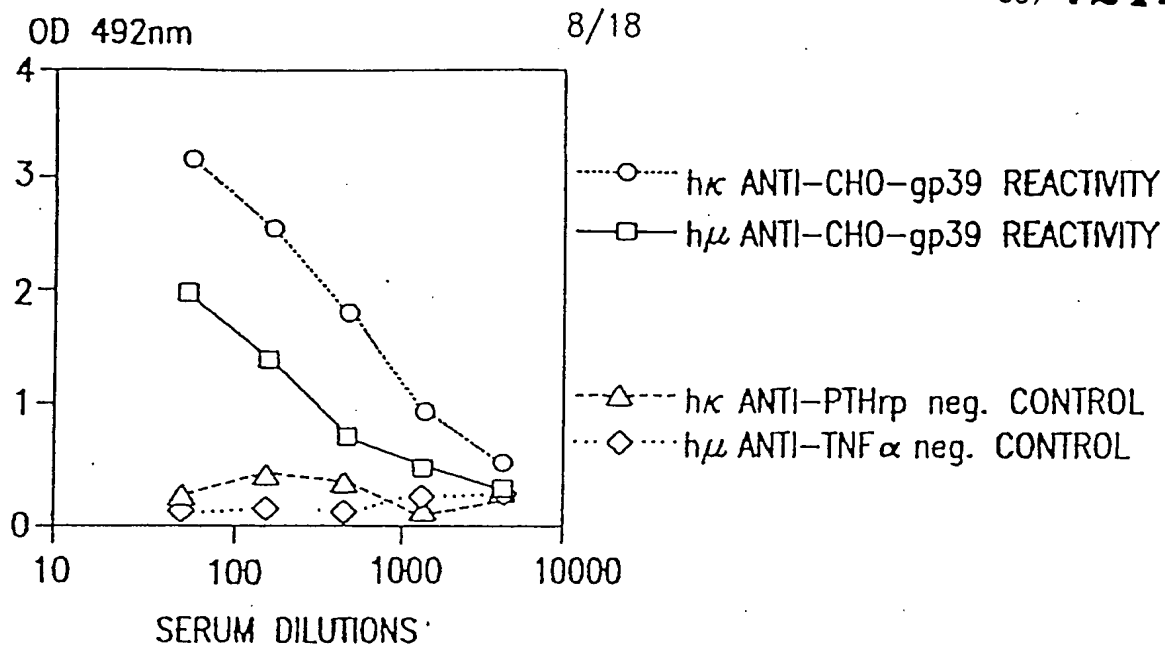


FIG.10

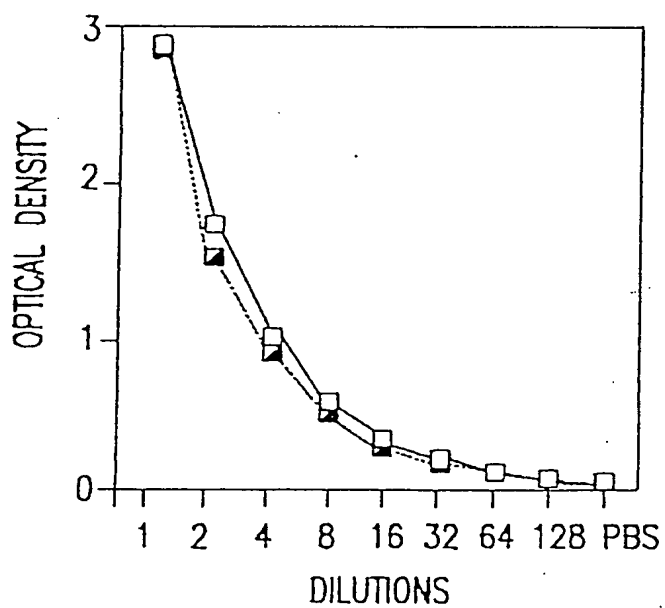


FIG.11

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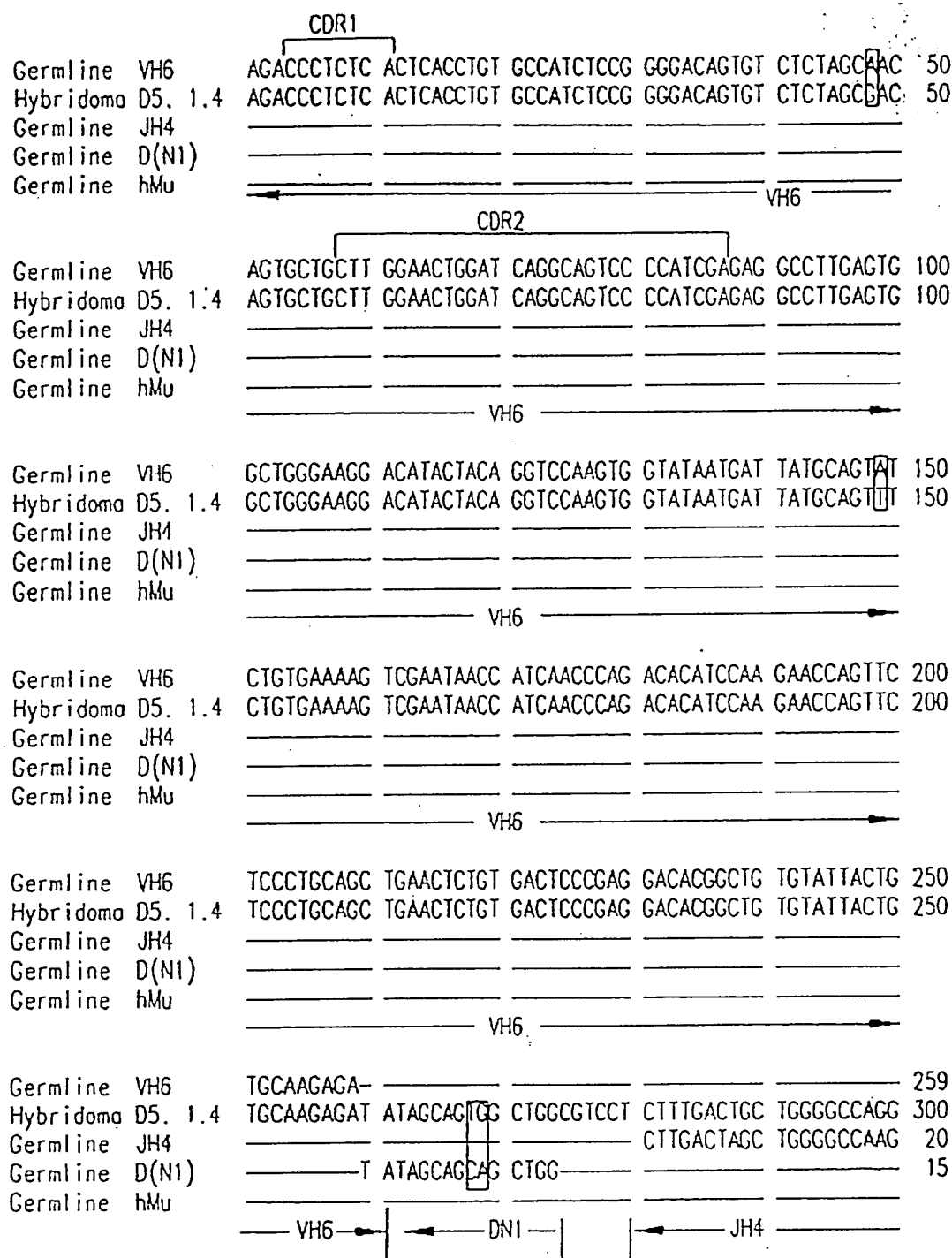


FIG.12A

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Germline	VH6	_____	_____	_____	_____	_____	259
Hybridoma	D5. 1.4	GAACCTGGT	CACCGTCTCC	TCAGGGAGTG	CATCCGCCCC	AACCCCTTTTC	350
Germline	JH4	GAACCTGGT	CACCGTCTCC	TCA_____	_____	_____	43
Germline	D(N1)	_____	_____	_____	_____	_____	15
Germline	hMu	_____	_____	GGGAGTG	CATCCGCCCC	AACCCCTTTTC	27
		_____ JH4 _____		→ ←		hμ _____	
Germline	VH6	_____	_____	_____	_____	_____	259
Hybridoma	D5. 1.4	CCCCTCGTCT	CCTGTGAGAA	TTCCCCGTCG	GATACGAGCA	GCGTGCCCGT	400
Germline	JH4	_____	_____	_____	_____	_____	43
Germline	D(N1)	_____	_____	_____	_____	_____	15
Germline	hMu	CCCCTCGTCT	CCTGTGAGAA	TTCCCCGTCG	GATACGAGCA	GCGTGCCCGT	77
		_____	_____	hμ _____	→		

FIG.12B

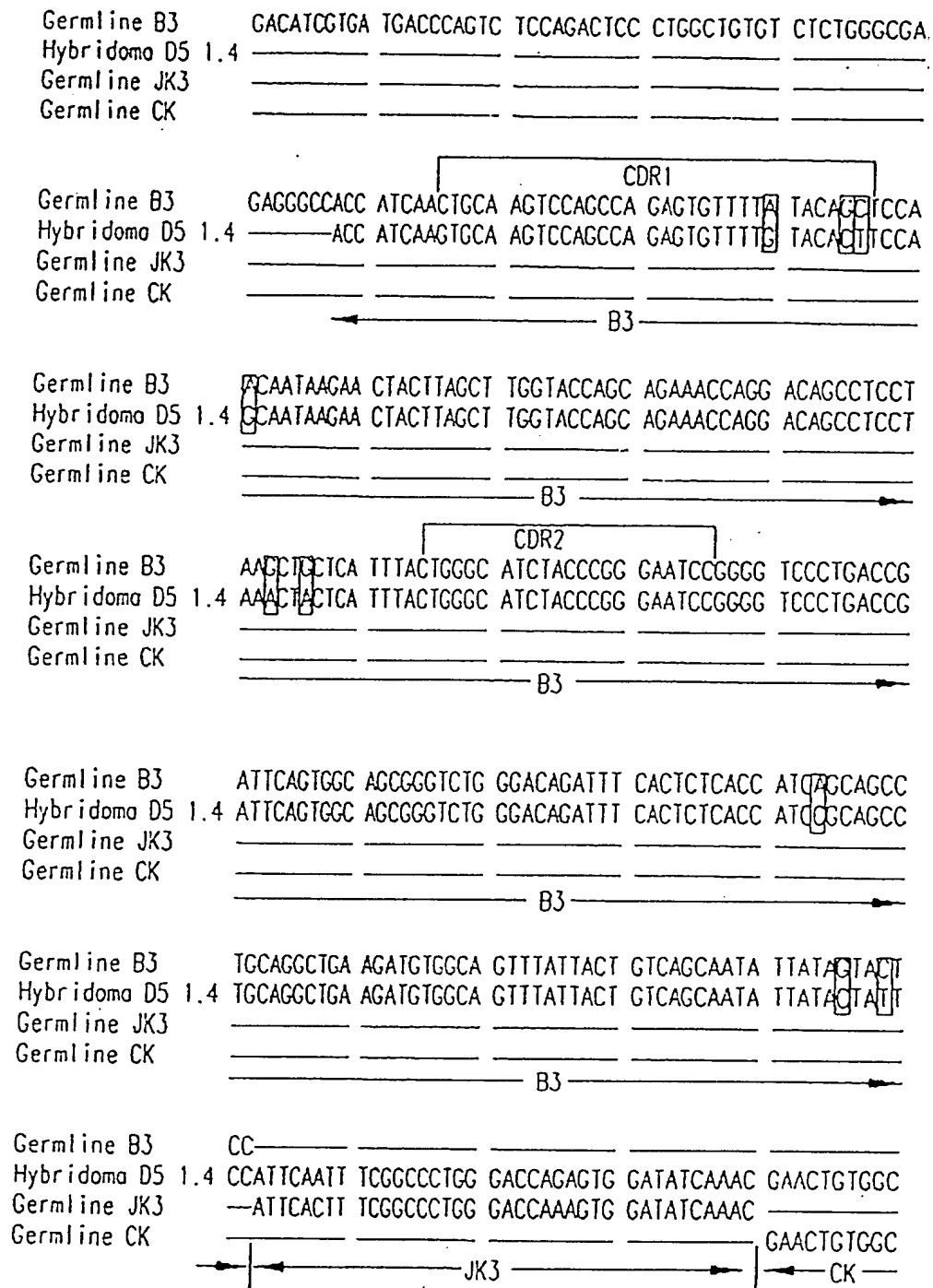


FIG.13A

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Germline B3	_____	_____	_____	_____	_____
Hybridoma D5 1.4	TGCACCATCT	GTCTTCATCT	TCCCGCCATC	TGATGAGCAG	TTGAAATCTG
Germline JK3	_____	_____	_____	_____	_____
Germline CK	TGCACCATCT	GTCTTCATCT	TCCCGCCATC	TGATGAGCAG	TTGAAATCTG
	_____ CK _____				
Germline B3	_____	_____	_____	_____	_____
Hybridoma D5 1.4	GAACGCGCTC	TGTTGTGTGC	CTGCTGAATA	ACTTCTATCC	CAGAGAGGCC
Germline JK3	_____	_____	_____	_____	_____
Germline CK	GAACGCGCTC	TGTTGTGTGC	CTGCTGAATA	ACTTCTATCC	CAGAGAGGCC
	_____ CK _____				
Germline B3	_____	_____	_____	_____	_____
Hybridoma D5 1.4	AAAGTACAGT	GGAAGGTGGA	TAACGCCCTC	CAATCGGGTT	GGGGAAAAA
Germline JK3	_____	_____	_____	_____	_____
Germline CK	AAAGTACAGT	GGAAGGTGGA	TAACGCCCTC	CAATCGGGT-	_____
	_____ CK _____				

FIG.13B

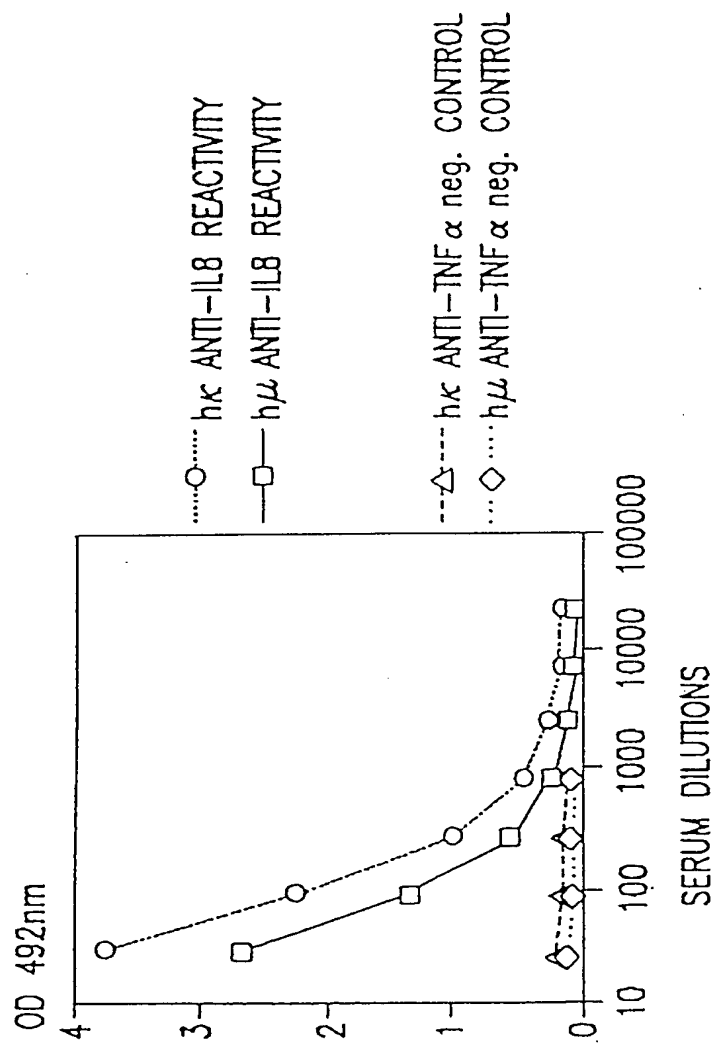


FIG.14

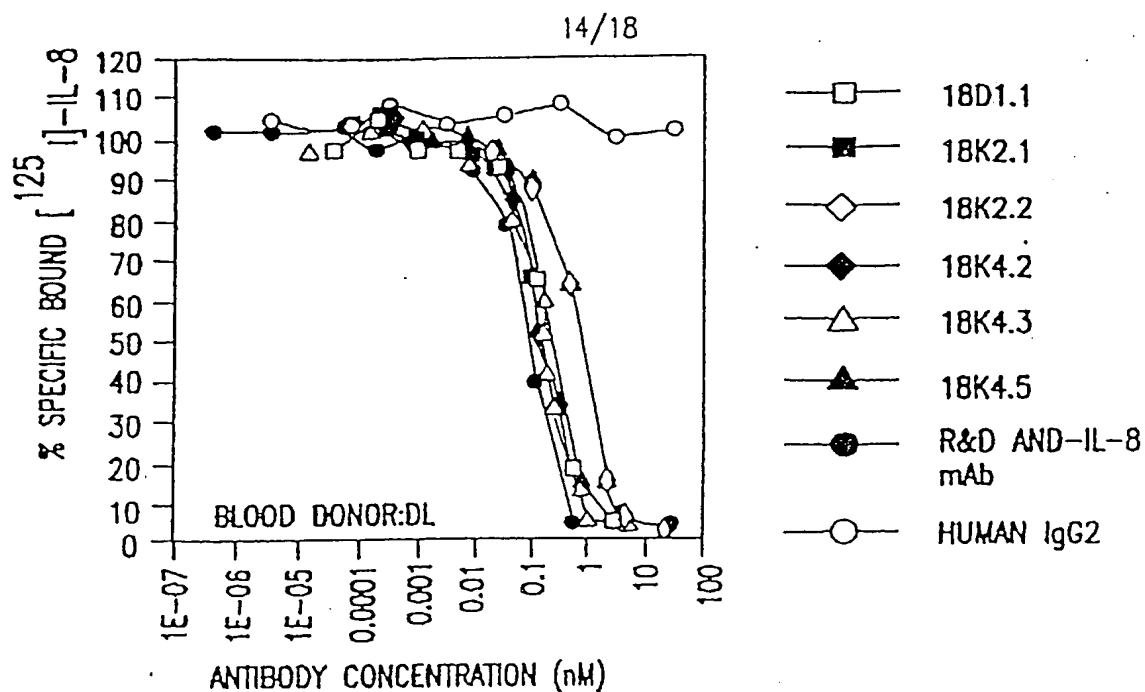


FIG.15A

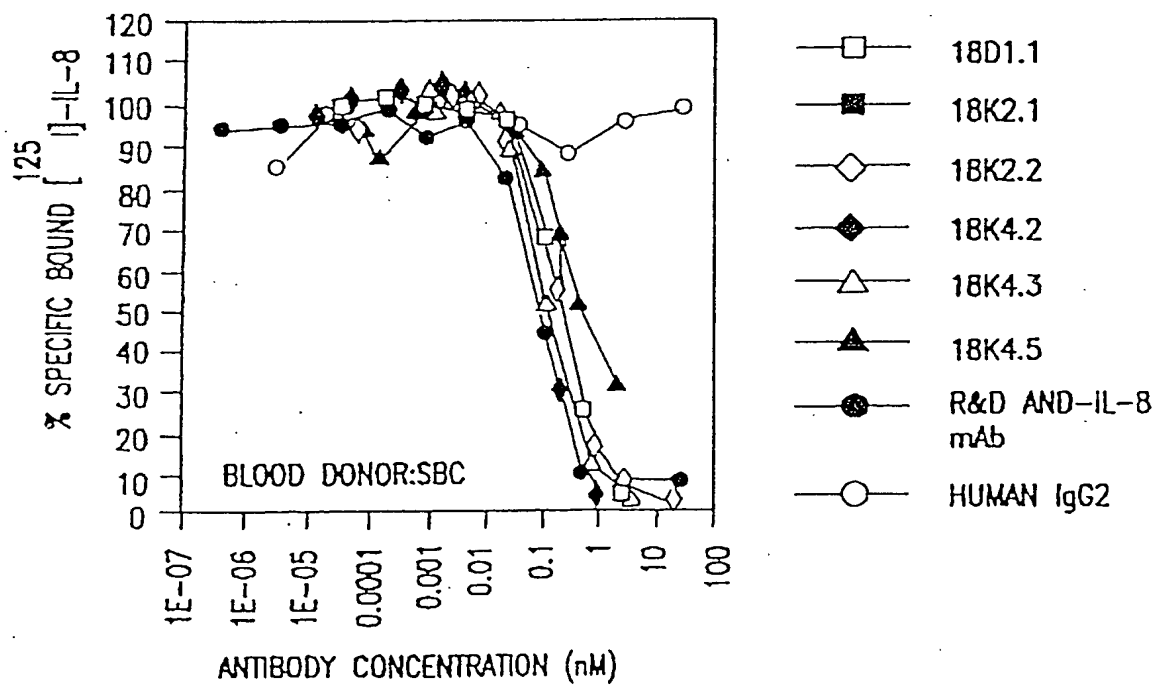


FIG.15B

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[CCTGTCCCTCACCTGCGCTGTCATGGTGGGTCTTCAGTGGTTACTACIGGAGCIGGATCCGCC
AGCCCCAGGGAAGGGACTGGAGTGGATTGGGGAAATCAATCAAAGTGGAAGCACCAATTACAA
CCCGTCCCTCAAGAGTCGAGTCATCATATCMTAGACACGTCCAAGACCCAGTTCTCCCTGAAAT
TGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGA][GACTCCCC][ATGCT
TTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCCTCAG]CCTCCACCAAGGGCCCCATCGG
TCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGC(GC)GCCCTGGGCTGCCTG
GTCAAGGACTACTTCC

FIG. 16A

[CAGTCTCCATCCTCCCTGTCTGCATCTGTAGGCGACAGAGTCACCATCACTTGCCAGGCGAGTC
AGGACATTAGTAAGTTTTTAAGTTGGTTTCAACAGAAACCAGGGAAAGCCCCTAACTCCTGATC
TACGGTACATCCTATTTGGAAACCGGGTCCCATCAAGTTTCAGTGGAGTGGATCTGGGACAGA
TTTTACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACATATTTCTGTAACAGNATG
ATGATCTCCC][ATACACTTTCGGCCCTGGGACCAAGTGGATATCAAAC]GAACTGTGGCTGCAC
CATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGAAATCTGGAAGTGCCTCTGTTGTGTGCC
TGCTGAATAACTTCTATCCCAGAGAGGCCAAAGTACAGTGGAGGTGGATACGCCC

FIG. 16B

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[AGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACTTCAGTAGCTAIGGCATGCACTGGNT
CCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGAAATATCATATGATGGAAGTAATAAA
TACTATGTAGACTCCGTGAAGGGCCGACTCACCACTCCAGAGACAAITCCAAGAACACGCTGT
ATCTGCAAATGAACAGCCTGAGAGCTGAGGACACGGCTGIGIATTACTGTGCGAGAGA][CCGAC
TGGGGAT][CTITGACTACTGGGGCCAGGGAACCTGGTCACCGTCICCTCAG]CCTCCACCAAGG
GCCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGC(GC)GGCCCT
GGGCTGCCTGGTCCAAGGACTACTTCCCCGAACCGGTGACGGTGTGCTGGAACCTCAGGCGCTC
TGACCAG

FIG. 16C

[CTGACNCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGT
CCAGCCAGAGTGTTTTATACATCTCCAACAATAAACTACTTAGCTTGGTACCAGCAGAAACCA
GGACAGTCTCCTAAACTGCTCATTTACTGGGCATCTACCCGGAAICCGGGGTCCCTGACCGATT
CAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTG
GCAGTTTATTACTGTCAACAGTATTATGATACTCC][ATTCACTTTCGGCCCTGGGACCAAAAGTGG
ATATCAAAC]GAACTGTGGCTGCACCATCTGTCTTCATCTTCCGCCATCTGATGAGCAGTTGAAA
TCTGGAACCTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTG
GAAGGTGGNTAACGCCCCA

FIG. 16D

[TCCCTCACCTGCGCTGTCTATGGTGGGTCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCC
CCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCATTCAICATGGAAACACCAACTACAACCCG
TCCCTCAAGAGTCGAGICTCCATATCAGTTGACACGICCAAGAACCAGTTCICCCIGACACTGAG
CTCTGTGACCGCCGCGGACACGGCTGTGIAITACTGTGCGAGAGG][GGGAGCAGTGGCTGCG][T
TTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG]CCTCCACCAAGGGCCCATCGGT
CTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGC(GC)GGCCCTGGGCTGCCTG
GTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCTGTGG/MCTCAGGCGCTCTGACCAGCGGC
GTGCACACCTTCCCA

FIG. 16E

[TGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCAICACTTGCCAGGC
GAGTCAGGACATTAGTAACTATTTAAATTGGTATCAACAGAAAGCAGGGAAAGCCCCCTAAGGTCC
TGATCTACGCTGCATCCAATTTGGAAGCAGGGGTCCCATCAAGGTTCAGTGGAAGTGGATCTGGG
ACAGATTTTACTTTACCATCAGCAGCCTGCAGCCTGAAGATATTGCAACATATTATTGTCAACA
CTATGATAATCTJA[CTCACTTTCGGCGGAGGGACCAAGGTAGAGATCAAAC]GAACTGTGGCTGC
ACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGAAAICTGGACTGCCTCTGTTGTGTG
CCTGCTGAATAACITCTATCCCAGAGAGGCCAAAGTACAGTGGAAAGGTGG

FIG. 16F

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AGTCTCTGAAGATCTCCTGTAAGGGTCTGGATACAGCTTTACCAGCTACIGGATCGGCIGGGTG
CGCCAGATGCCCGGGAAAGGCCTGGAGIGGATGGGGATCAICATCCTGGTGACTCTGATACCA
GATACAGCCCGTCCTTCCAAGGCCAGGTCACCAICICAGCCGACMGTCATCAGCACCGCCTA
CCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATGTAIIACTGTGCGAGACA][GGACGG
TG][ACTCCTTIGACTACTGGGGCCAGGGAACCCTGGTCACCGTICCTCAG]CCTCCACCAAGGG
CCCATCGGTCTTCCCCCTGGCGCCCTGCTCCAGGAGCACCTCCGAGAGCACAGC(GC)GGCCCIG
GGCTGCCTGGTCCAAGGACTACTTCCCCGAACCGGTGACGGIGTCTGTGGAACCTCAGGCGCICT
GACCAGCGGCGTGCACACCTTCCCACTGCCA

FIG. 16G

TGTCTGCATCTATTGGAGACAGAGTCACCATCACTTGCCGGGCMGTCAGAGCATTAGCAACTA
TTTAAATTTGGTATCAGCAGAAACCAGGGCAAAGCCCCCTMGTTCCCTGATCTATGGTGCATCCAGT
TTGGAAAGTGGGGTCCCATCANGGTTCACTGGCAGTGGATCTGGGACAGATTTCACTCTCACCAT
CAGCAGCCTGCAACCTGNGGATTTTGCAACTTACTACIGTCAACAGAGTTACAGTAACCC]T[CTC
ACTTTTCGGCGGNGGGACCAANGTGGAGATCAAAC]GAACTGTGGCTGCACCATCTGTCTTCATCT
TCCCGCCATCTGATGAGCAGTTGAAATCTGGAACCTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACA

FIG. 16H